

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 119649.2 LK	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/IL 99/ 00485	International filing date (day/month/year) 08/09/1999	(Earliest) Priority Date (day/month/year) 11/09/1998
Applicant GARDINO INVESTMENT N.V. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the International search was carried out on the basis of the International application in the language in which it was filed, unless otherwise indicated under this item.

☐ the International search was carried out on the basis of a translation of the International application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the International application, the International search was carried out on the basis of the sequence listing:

☐ contained in the International application in written form.

☐ filed together with the International application in computer readable form.

☒ furnished subsequently to this Authority in written form.

☒ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the International application as filed has been furnished.

☒ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

6A _____

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

T/IL 99/00485

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C12N15/62 C07K14/47 C07K14/475 C12Q1/68
 A61K31/7115 A61K38/17 A61K38/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MOROZ C ET AL: "T-cell mitogenesis stimulates the synthesis of a mRNA species coding for a 43-kDa peptide reactive with CM-H-9, a monoclonal antibody specific for placental isoferitin." PROC. NATL. ACAD. SCI. USA , vol. 86, no. 9, May 1989 (1989-05), pages 3282-3285, XP002131123 abstract	1-7, 16, 28, 29
Y	page 3285, left-hand column, line 8-47	8-12, 17-27
Y	US 4 882 270 A (MOROZ CHAYA) 21 November 1989 (1989-11-21) column 2, line 22 -column 3, line 22 claims 26-35	8-11, 17-20, 22, 23, 27

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier document but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
 "&" document member of the same patent family

Date of the actual completion of the international search

24 February 2000

Date of mailing of the international search report

15/03/2000

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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 89 09936 A (MOROZ CHAYA) 19 October 1989 (1989-10-19) page 1, line 23 -page 9, line 5 example 6 claims 1,13-18,26,30,33-35,38,39 ---	8,9,12, 17,18, 21,22, 25-27
Y	US 5 571 678 A (MOROZ CHAYA ET AL) 5 November 1996 (1996-11-05) column 2, line 57 -column 3, line 63 examples 7-9 claims 1,4,7 ---	8,9,12
Y	FISCH B ET AL.: "Placental isoferitin as a marker of early abortion in pregnancies induced by in vitro fertilization" PLACENTA, vol. 17, no. 4, May 1996 (1996-05), pages 247-251, XP000877132 abstract ---	8,9,12
Y	GARTY B Z ET AL.: "High serum levels of placental isoferitin p43 component in Down syndrome." CHILDREN'S HOSPITAL QUARTERLY, vol. 10, no. 1, 1998, pages 39-41, XP000876978 abstract ---	24
X	PATENT ABSTRACTS OF JAPAN & JP 07 031482 A (RAIFU TECHNOL KENKYUSHO), 3 February 1995 (1995-02-03) Y Note: 93.8% aa sequence identity of aa 1-118 with aa 1-118 of SEQ ID NO:6. abstract figures 1-7 ---	1-7,16
X	DATABASE GCG_GENESQ_P 'Online! Geneseq ID R71567, AC R71567, 1 November 1995 (1995-11-01) ZH LIFE TECHNOLOGY KENKYUSHO: "Human monocyte growth factor" XP002131125 Y page 1, line 19-25 ---	1-7,16
Y	EP 0 426 458 A (JAPAN ANTIBIOTICS RES ASSOC) 8 May 1991 (1991-05-08) page 2, line 37-45 ---	8-10, 17-19
Y	EP 0 426 458 A (JAPAN ANTIBIOTICS RES ASSOC) 8 May 1991 (1991-05-08) page 2, line 37-45 ---	8-10, 17-19
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T/IL 99/00485

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BOYD D ET AL.: "Structural and functional relationships of human ferritin H and L chains deduced from cDNA clones" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 260, no. 21, 25 September 1985 (1985-09-25), pages 11755-11761, XP000876843 Note: 99.5% nt sequence identity of nt 56-432 of H ferritin cDNA with nt 86-462 of SEQ ID NO:1. abstract page 11755, left-hand column, line 13-17 figures 2,3	1-7,16
X	--- DATABASE EMORG 'Online! EMBL ID MIHSXX, AC V00662, 9 June 1982 (1982-06-09) ANDERSON S ET AL.: "H. sapiens mitochondrial genome" XP002131126 Note: 99.5% nt sequence identity of nt 6486-6694 with nt 463-671 of SEQ ID NO:1. page 3, line 28-41 page 11	1-7,16
A	--- HIGGY N A ET AL: "Differential expression of human ferritin H chain gene in immortal human breast epithelial MCF-10F cells" MOLECULAR CARCINOGENESIS , vol. 20, no. 4, December 1997 (1997-12), pages 332-339, XP000876881 abstract	1,28
A	--- ROSEN H R: "Placental isoferritin-associated p43 in pregnancy and breast cancer. Minireview." NEOPLASMA, vol. 43, no. 6, 1996, pages 357-362, XP000876880 the whole document	1,10-12, 19-21, 23,25,26
A	--- MAYMON R ET AL.: "Placental isoferritin: a new biomarker from conception to delivery" BRITISH JOURNAL OF OBSTETRICS AND GYNAECOLOGY, vol. 103, no. 4, April 1996 (1996-04), pages 301-305, XP000877134 the whole document --- -/--	1,12,21, 26

INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	<p>YANIV I ET AL: "p43, a new placental isoferritin subunit, is a growth factor for granulocyte-monocyte progenitor cells" BONE MARROW TRANSPLANTATION, vol. 23, no. suppl. 1, March 1999 (1999-03), page S83 (272) XP000876882 abstract</p>	13-15

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Information on patent family members

International Application No

T/IL 99/00485

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4882270	A	21-11-1989	IL 62879 A	29-09-1985
			CA 1201667 A	11-03-1986
			DE 3218312 A	09-12-1982
			FR 2505871 A	19-11-1982
			GB 2103238 A, B	16-02-1983
			JP 2032667 C	19-03-1996
			JP 5260990 A	12-10-1993
			JP 7051062 B	05-06-1995
			JP 1898034 C	23-01-1995
			JP 6014873 B	02-03-1994
			JP 57196154 A	02-12-1982
			US 5571678 A	05-11-1996
			US 4954434 A	04-09-1990
			US 5871735 A	16-02-1999
			US 5120640 A	09-06-1992
WO 8909936	A	19-10-1989	CA 1339958 A	21-07-1998
			EP 0408651 A	23-01-1991
			JP 3504640 T	09-10-1991
			US 5871735 A	16-02-1999
US 5571678	A	05-11-1996	IL 62879 A	29-09-1985
			US 5283177 A	01-02-1994
			US 5120640 A	09-06-1992
			CA 1201667 A	11-03-1986
			DE 3218312 A	09-12-1982
			FR 2505871 A	19-11-1982
			GB 2103238 A, B	16-02-1983
			JP 2032667 C	19-03-1996
			JP 5260990 A	12-10-1993
			JP 7051062 B	05-06-1995
			JP 1898034 C	23-01-1995
			JP 6014873 B	02-03-1994
			JP 57196154 A	02-12-1982
			US 4882270 A	21-11-1989
			US 4954434 A	04-09-1990
			US 5871735 A	16-02-1994
			AT 153765 T	15-06-1997
			AU 3440989 A	05-10-1989
			DE 68928079 D	03-07-1997
			DE 68928079 T	09-10-1997
			EP 0403554 A	27-12-1990
			JP 2788314 B	20-08-1998
			JP 3504272 T	19-09-1991
			WO 8908842 A	21-09-1989
JP 07031482	A	03-02-1995	NONE	
EP 0426458	A	08-05-1991	JP 3145499 A	20-06-1991
			US 5216133 A	01-06-1993